THE VARIABLE GEOMETRY OF ASIAN TRADE

by

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1. Introduction

The spectacular economic success of the Asian Pacific region has generated a vast literature\(^1\) that has identified many different, and often mutually exclusive, sources for that success. Most studies, however, have recognized the critical role played by international trade. The exceptionally rapid rates of economic growth achieved by the Asian countries is generally associated with their even more impressive achievements in export performance. Though exports of Asian countries have historically been oriented toward Western industrial countries, trade statistics indicate very substantial increases in trade flows within the region in recent years, and hence an apparent shift toward trade integration in the area.

Given the tendency toward regional trade agreements in Europe and North America (the Single European Market; the North American Free Trade Agreement) observers have increasingly speculated that the Asian Pacific region might emerge as an third, powerful trading bloc. Others take an opposite view and argue that concerns over emerging patterns of intra-Asian trade flows are totally misplaced. Their pattern is an entirely natural outcome of the the rapid growth of the Asian national economies and their geographic propinquity. Interpreting patterns of Asian trade flows remains highly controversial, as does hypothesizing about their significance for the global trading system.

This paper presents a very different interpretation of Asian trade patterns -- including rapidly growing intra-regional trade -- from the most prominent explanations in the literature. The data presented here, which draw on a recently compiled trade database, do not show the formation of an exclusive bloc, nor even an emerging one. But they also show that rapid economic growth in the Asian countries and their relative geographic preopinquity cannot by themselves explain the growth or the distinct patterns of Asia’s intra-regional trade. Instead increased intra-regional trade has reinforced -- not attenuated -- a unique trade and production arrangement that causes serious adjustment problems for countries outside the region and that will have to change in substantial and fundamental ways for Asian Regionalism to be “benign” for the international economy.

The paper is divided into three parts. The next section briefly surveys the literature in this area and identifies the two most widely received but contending interpretations of trade flow patterns.

\(^1\)For a survey of this literature see Hicks (1990)
in Asia\(^2\). This is followed by an examination of the relevant statistical evidence, drawing on an
original trade database, in order to specify the distinct character of Asia’s current trade and
production arrangement. The third section provides an alternative explanation of this arrangement.
It concludes with some remarks on the strategic consequences of this arrangement for the world
trading regime.

2. Asian Trade Integration: a review of the literature

In recent years the apparent movement toward increasing regional trade integration in the Asian
Pacific area has attracted much attention among scholars, but very different explanations have been
put forth to account for this trend. Furthermore, these analyses have identified different implications
for the future evolution of the world trading regime. While it is beyond the scope of this paper to
present a comprehensive review of this literature, two of the principal, competing views can be
identified here: (1) trade flow patterns point to the likely consolidation of an exclusive trading bloc
in East Asia, centered around Japan, with the risk of increasing discrimination against outsiders,
particularly U.S. and European exporters\(^3\); (2) despite an increase in aggregate intra-regional trade,
there is little evidence that Asian countries are moving towards a trade bloc, and no evidence of any
abnormality in the region’s trade pattern\(^4\).

The first line of thinking makes the following general arguments:

(a) Shifts in regional trade flows over the past decade and particularly in recent years confirm
that trade within the Japan-South-East Asia region has been rapidly increasing. For example, Japan's
trade with the rest of Asia exceeded that with the United States for the first time in 1991. In the latter
half of the 1980s, trade among the Asian NICs grew by 44.7% per year; exports from the NICs to
ASEAN countries grew by 31.7% per year. Similarly, substantial increases were achieved in trade
among the NICs, ASEAN and China (Jetro, 1992).

(b) A further indicator of the trend toward Asian economic integration is the rapid expansion of
Japanese direct investment in the Asian Pacific region (Urata, 1993). Particularly in the second half
of the 1980s, Japan stepped up its direct investment into the Asian countries, investing at more than

\(^2\)The term ‘Asia’ will be used throughout to refer to Japan, the four Asian NICs (Hong Kong, Singapore, South
Korea, Taiwan), the four ASEAN economies other than Singapore and Brunei, namely, Indonesia, Malaysia, the
Philippines and Thailand, plus China.

\(^3\)See, i.e., Dornbusch (1990); Krause (1990); Nishikawa (1992).

twice the U.S. and British rates in the region. More recently, the Asian NICs have also emerged as important investors in the area. Direct investment in ASEAN countries expanded at a very rapid pace in the most recent period (Jetro, 1992).

(c) Greater economic integration in Asia, as evidenced by this increase in intra-regional trade and investment, has taken place without the implementation of any formal inter-governmental arrangements; rather, increasing intra-regional trade seems to be primarily the outcome of autonomous decisions by firms and the result of market forces.

d) Given the diversity of history, culture and tradition among the Asian countries, it seems unlikely that they could proceed along integration paths similar to those currently characterising the European Community and the NAFTA; however, there is a growing concern that an Asian trade network will develop into a trading bloc by increasingly discriminating against firms and products from outside the region.

e) Fear of an exclusionary Asian trading bloc will intensify pressure for greater intra-regional trade in the European and North American regions. The European Union in particular is anxious about discriminatory trading arrangements, especially after allowing Central and Eastern European countries access to the EU market. Such fears could drive regions to erect more and more barriers to their own markets, and ultimately divide the world economy into three huge and probably inward-looking and discriminatory trading blocs.

The second set of interpretations provides a very different perspective:

(a) It is certainly true that trade within the Japan/South-East Asian region substantially increased in the second half of the 1980s. While East Asian trade with other regions in the world increased rapidly, trade with other Asian countries increased even more rapidly. The latter, however, was the automatic outcome of the rapid growth in overall output and trade achieved by Japan and most East Asian countries in the 1980s. Therefore, the increase in the intra-regional trade is entirely attributable to the greater participation of Asian countries in world trade flows; specifically, to their rapid growth and geographical proximity. (Frankel, 1991)

(b) It is also true that, by the end of the 1980s, Japan became the world's single most important source of foreign direct investment (FDI). The major beneficiary of these flows, however, has not been East Asia, but North America. Less than 20 per cent of the total Japanese direct investment has been directed toward Asia, although Japanese FDI flows to this region have been rising significantly in recent years.
(c) These qualifications suggest that there is no significant long-run trend that points to the formation of a self-contained Asian trading bloc centered around Japan. Indeed, if calculated to take into account the influence of geographic proximity and rates of GNP growth, by the late-1980s the intra-regional share of Asian trade was not very different from that of the early 1970s (Frankel, 1991).

(d) In the past, the Asian Pacific region's foreign trade was strongly oriented toward Western industrial countries. Recent trade patterns suggest that extra-regional trade, particularly with U.S. and Europe, still remains very significant for Japan and East Asia. Given this persistent dependency on extra-regional trade, the Asian region is very far from transforming itself into an exclusive, protectionist, regional arrangement.

(e) A successful trading bloc must be characterized by at least four main features (Schott, 1991): (i) similar levels of per capita income among member countries; (ii) geographic proximity of member countries; (iii) similar or compatible trading regimes; (iv) political commitment to regional organisation. A future Asian trade bloc centered around Japan would not meet any of the above conditions except geographic proximity.

(f) Although the other two regional trading arrangements in Europe and in North America meet the above conditions much better than Asia, the role of extra-regional trade has been and remains very important for them as well. Thus it seems fair to say that each region retains a strong interest in an open multilateral trading system and that there little reason to believe that Europe, North America or East Asia are developing into trading blocs. Therefore, "the major regional initiatives currently under way are more likely to represent the building blocks of an integrated world economy than stumbling blocks which prevent its emergence" (Lawrence, 1991).

The next assesses the issue of regional patterns of Asian trade flows and its implications for the future of the international trade regime in the light of these two competing interpretations.

3. Asian Trade Integration: a review of the evidence

This section examines the evolution in trade of and between Asian countries, and situates it within long term regional trade patterns. The most prominent study used the sum of exports and imports of single countries to represent trends in trade integration (Frankel, 1991); an other chose to look only at exports (Lawrence, 1991); some, however, have used both exports and imports to examine Asian regional trade patterns (Schott, 1991). This paper employs the latter method because
it gives the most complete picture of the patterns of integration forming in Asia. The analysis relies on a recently compiled trade database (SIE World Trade) comprising U.N. and OECD statistical sources (450 product classes, 98 sectors and 25 commodity groups) for more than 80 countries (OECDs, NICs, ex-CMEA and LDCs).

According to Table 1, which shows shares of various regions and countries in the overall merchandise exports and imports of East Asia in selected years from 1970 to 1992, the Asian intra-regional share of both exports and imports has significantly increased (around 17.4 percentage points for imports and 10.2 points for imports). If trade in manufactures for the same period is considered (Table 2), the intra-regional share also increased substantially, and on the same order of magnitude. During the past two decades there has thus been an increasing regionalization of Asian trade.

A closer examination of these changes in Asia's trade flows, however, reveals substantially different patterns for export and import flows. The intra-regional share of East-Asian imports steadily increased during the entire period considered here (from 27.7 per cent in 1970 to 44.1 per cent in 1992 in total merchandise trade, and from 35.8 to 52.4 per cent in trade in manufactures during the same years: see Tables 1-2); as for exports, however, the dependency of Asian countries on intra-regional markets remained stable and rather limited during all 1970s and the first half of the 1980s, increasing only during the second half of the 1980s. Thus two phases may be distinguished in the evolution of Asian trade over the past two decades: the first covers the 1970s and the first half of the 1980s, while the other includes the early 1990s.

In the first period, Asian countries showed a high propensity to export to extra-regional markets. North America and Europe, which received around 51 per cent of the total Asian manufactured exports in the early 1970s, continued to absorb more than 50 per cent during the first half of the 1980s, although there were wide fluctuations in the shares of Asian exports absorbed by the regions given the volatile international macroeconomic and financial environment during this phase. Of the extra-regional markets, the United States provided the largest outlet for Asia’s exports, increasing in the first half of the 1980s its share of imports from the region in parallel with the strong appreciation of the dollar in that period. It is thus fair to say that at least between 1970 and 1985 the North American market, and especially the U.S. market, was the engine of export growth for most Asian countries, particularly for the Asian NICs (see Tables 3 and 4). During this same period the share of

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5For a detailed presentation of the data base SIE World Trade used in this paper, see Guerrieri (1992); (1993) and the Appendix of this paper.
intra-regional merchandise exports remained largely stable, with exports between Asia countries significantly lower than exports between Asia and the rest of the world. In the case of manufactures, the share of intra-regional exports was likewise consistently smaller than the share of exports to North America (Table 2).

By contrast, the level of intra-regional imports increased steadily during this first phase, despite wide, year-to-year fluctuations (Tables 1 to 4). This largely reflected the trade surpluses which accompanied the rapid growth of the Asian economies, especially the trade surpluses with the United States and North America. In the first phase, Asia as a whole continued to penetrate the markets for manufactures of North America, and to a much less degree of Europe, without much reciprocal import of their goods. Whereas in the 1970s Asian trade balances (standardized) fluctuated around a nil value, with trade surpluses in manufactures compensating trade deficits in raw material and agricultural products, during the first part of the 1980s the trade surplus of Asian countries increased considerably thanks to a soaring positive trade balance in manufacturing trade (Figs. 1-2)⁶. Thus Asia’s cumulative surplus in trade of manufactures increased dramatically in the period from 1980 to 1985, reaching nearly 650 billion dollars. North America, especially the United States, was the main contributor to this surplus (Tables 5-6).

The distribution of this external surplus has been highly uneven within Asia, however, with Japan accounting for much of it. During the first phase, Japan continued to be a more important source of imports for the Asian countries than an increasing outlet market (Tables 1-4). In the mid-1980s Japan took only 2.9 per cent of the Asian manufactured exports (8.9 per cent for merchandise exports), whereas nearly 28.3 per cent of the Asian manufactured imports came from Japan (15 per cent for merchandise imports) (Table 1-2). This markedly asymmetrical role of Japan has been the source of increasing Japanese trade surpluses toward the other Asian countries, especially the Asian NICs, during the entire first phase, particularly the first half of the 1980s. The cumulative trade deficit of the Asian NICs and NECs with Japan, for example, rose to 30 billion dollars in the period

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⁶ The standardized trade balance (STB) highlights the international distribution over time of trade surpluses and deficits among countries in each group of products. Trade balances are normalized by total world trade in the same group of products (CEPII 1989). The evolution of trade balance distribution permits to highlight competitiveness patterns of single countries in a certain group of products. For each country (j) the indicator is given by:

\[
\text{STB} = \frac{X_i - M_i}{W_{Ti}}
\]

Where \(X_i\) = total exports of country (j) in the product group (i); \(M_i\) = total imports of country (j) in the product group (i); \(W_{Ti}\) = total world exports (imports) in the product group (i).
from 1980 to 1985 (Table 5). In trade of manufactures, the trend was even more accentuated, so that the Japanese accumulated an impressive surplus of 169 billion dollars in the first half of the 1980s (Table 6). Thus Japan, while running a trade surplus with North America, also ran a substantial trade surplus in manufactured goods with its Asian neighbors (especially the Asian NICs) (Figs.3-4). At the same time, in parallel with their trade deficits with Japan, the Asian NICs (and to a lesser extent the Asean countries) ran compensating surpluses with the rest of the world, especially with the United States and North America (Figs. 5-8; Tables 5-6).

To sum up, a pattern of triangular trade, rather than regionalisation, appears to characterise Asian trade flows in this first phase. The Asian countries depended on Japan as a major source of manufactured imports and relied heavily on extra-regional markets, especially the North American and U.S. markets, for their exports of manufactured finished goods. This triangle trade was visibly hierarchic: on top, Japan sold mainly capital goods and technologies, and on bottom the United States (and to a lesser extent Europe) bought mainly the final goods. As Asian exports grew rapidly in the second half of the 1970s and the first half of the 1980s, they began to cause serious adjustment problems for countries outside the region. These adjustment problems contributed to increasing trade tensions, first between the United States and Asia, but then also between Europe and Asia, leading to growing protectionist measures directed at exports from Japan (Porges, 1991) and, to a lesser extent, from the Asian NICs (Noland, 1990).

During the second half of the 1980s, the revaluation of the yen, expectations of its further appreciation, and the growing protectionist attitude in Europe and North America brought on a substantial change in Asian trade flows: the share of trade among Asian countries increased sharply, so that by the beginning of the 1990s the share of intra-regional imports reached 45.1 per cent (52.4 per cent for manufactures) and the share of intra-regional exports reached 39.8 per cent (36.2 per cent for manufactures) (Tables 1-2). In contrast to the steady increase of intra-regional imports observed in the first phase, in the second half of the 1980s it was intra-regional exports which rose substantially: the share of exports rose from 32.5 per cent in 1985 to 39.8 per cent in 1992 for merchandise trade and from 25.6 to 36.2 per cent in the same period for trade in manufactures.

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7 On the trilateral pattern of East Asia’s trade see Park and Park (1991), Fouquin et al. (1991)
8 Under this pattern the Asian NICs have developed production structures vertically integrated with Japan, by importing intermediate goods as well as capital goods from Japan, then exporting the finished goods to destinations outside the region in particular, the US (Calder, 1991; Park and Park, 1991)
Consequently, the role of extra-regional outlets decreased: according to Table 1, the share of Asian exports going to the U.S. dropped from about 34 per cent to 25 per cent in parallel with the strong depreciation of the dollar.

Japan certainly contributed to this increase of intra-regional exports by increasing their imports of manufactured goods from the other Asian countries in the second half of the 1980s (Table 4). This took place in parallel with the significant appreciation in the value of the yen together with “market opening” measures adopted by Japan in that period. On the other hand, since 1985 a rising share of Japanese manufactured exports has gone to other Asian countries, showing an increasing role of Japanese firms as supplier for the region, especially of intermediate and investment goods (Table 3-4). But the share of manufactured goods imported from countries within the region other than Japan has been rising even more strongly since 1985, so that relative to the share of manufactured goods exchanged between the NICs and the Asean countries, the share of manufactured imports from Japan has in fact decreased (Table 1 and 4). The bilateral relationship between the NICs and Asean countries then grew significantly in the second phase, signaling the emergence of a new potential axis in the region (Tables 3 - 4).

According to some analysts, this more recent increase in the regionalisation of Asian trade has raised the prospect of the formation of an Asian trading bloc (Dornbusch, 1990; Krause, 1990). The assumption is that the triangular trade pattern and past extra-regional linkages, which, as shown earlier, characterized the Asian trade flows in the first phase, are being replaced by new trading relationships, driven endogenously by the rapid growth of the regional market, that will lead to Asian regional integration. This new pattern is fed by Japan’s increasing capacity to absorb more manufactured imports from other Asian countries, and by the Asian NICs opening their markets for imports of the Asean countries and China.

Although the evidence reviewed here seems to confirm a substantial increase in Asian intra-regional trade over the second phase, in order to determine the validity of this view it is necessary to examine the changing patterns of Asian trade in this period in some detail.

To be begin with, one must recognize that in the period from the mid-1980s up to the early 1990s Asia as a whole has maintained a high export dependency on, and trade surpluses with, the rest of the world. As shown in Figures 1 and 2, the Asian trade surplus (standardized) fluctuated throughout the 1980s, largely as a result of variations in the continuing, large trade surplus with the United States. After reaching a peak in the mid-1980s, this trade surplus declined rapidly during the
second half of the 1980s because of changes in the real exchange rate of the dollar and in the relative incomes of the two areas of the Pacific in that period. Yet at the beginning of the 1990s (that is, at the end of a ten year cycle of the dollar's external value) the Asian trade surplus was still much higher than that in the beginning of the 1980s. Asia’s cumulative trade surplus—the sum of trade balances from 1986 to 1992—more than quadrupled with respect to the cumulative trade surplus for the first half of the 1980s, and it doubled in the case of trade in manufactures, reaching 1.36 trillion dollars (Tables 5 and 6). As in the past, North America, and especially the United States, was the major source of these surpluses. But Europe also significantly contributed to the trade imbalance during the second half of the 1980s, tripling its trade deficit in manufactures and mostly compensating the declining trade surplus towards the United States in the more recent years (Table 6). North America and Europe then remained the key markets for Asian countries, as evidenced by the fact that even in 1992 they absorbed nearly the same share of Asia’s merchandise exports as they had twenty years before (47 per cent in 1992; 51 per cent in 1970: Table 1).

It is also enlightening to look at the intra-regional distribution of Asia’s overall trade surplus. In the second half of the 1980s, Japan ran increasing trade surpluses with other Asian countries, especially with the Asian NICs, whereas its trade surplus with the U.S. sharply declined, compensated only partially by the increase in the trade surplus with Europe (Figures 3 - 4). Asia’s cumulative trade deficit with Japan rose from about 30 billion dollars in the first half of the 1980s to 163 billion dollars in the period covering the second half of the 1980s and the early 1990s (Table 5). In manufactured products, the data reported in Table 6 are even more emblematic, since Asia’s cumulative trade deficits with Japan rose from 169 to 343 billion dollars. This demonstrates that the Japanese market remained a poor outlet for Asian exports, and that despite the strong appreciation of the yen, the share of Asian exports destined for Japan rose only slightly between 1985 to 1992. Because of this inadequate increase in Japan’s capacity to import, the share of Asian manufactured exports destined for the United States was still much higher than the share going to Japan, even in the early 1990s (Table 4).

To offset their substantial rising trade deficit with Japan during the 1980s, the Asian countries, and especially the NICs, generated substantial trade surpluses in manufactures with the rest of the

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9More generally, Japan own low ratio of manufactured imports to GNP has always been much lower than those of the United States and Germany, for example, and it did not change substantially during the past two decades, see Lawrence (1991), Kreinin (1993).
world, especially with the U.S., and to a lesser extent Europe (Fig. 6). During the second half of the 1980s, however, the Asian NICs experienced a relative decline in their trade surplus with the U.S., due to the real appreciation of their currencies vis-a-vis the dollar. At the same time, the NICs’ trade deficits with Japan increased, despite the real depreciation of their currencies towards the yen. As a consequence, in the early 1990s they began running overall trade deficits (Fig. 5).

Structural factors explain the differences in behavior of NIC net exports to the U.S. and Japan. During the 1980s, the trade balance toward the U.S., either in total trade or in manufactures, fluctuated considerably and was very elastic with respect to changes in real exchange rates, whereas the trade balance toward Japan did not fluctuate but rather shifted steadily in favor of Japan throughout the 1980s, despite the appreciation of the yen (Tables 5 and 6, Fig.5). This is because the increase in the NICs’ exports to Japan was matched by an almost equal increase in dependence on Japan for imports of highly price-inelastic, technology-intensive products and capital goods (Park and Park, 1991; Guerrieri, 1994). This dependence explains why the NICs’ deficit with Japan continued to be very high in the 1980s despite the rapid growth of the NICs' exports to Japan and the real depreciation of the currencies of the NICs vis-a-vis the yen.

To sum up, in the second half of the 1980s the rapid growth of Asian trade and the intensification of intra-Asian trade did not substantially modify the triangular trade pattern which characterised Asian trade flows from 1970 to 1985. At the beginning of the 1990s, Asian countries still depended heavily on exports to the U.S. and Europe, and imported more and more heavily from Japan, with most Asian countries running large trade deficits with Japan and symmetrical trade surpluses with the United States and Europe. Under this persistent triangular pattern of trade, the high growth of Asia's exports has created serious adjustment problems for countries outside the region. This has then led to increasing trade tensions and fears that the multilateral trade framework might be jeopardized (Sandholtz et al., 1992).

The evidence reviewed here does not support the contention that Asia is evolving into an exclusive trading bloc centered around Japan, with the risk of increasing discrimination against outsiders. On the contrary, our analysis of Asian import and export flows over the last twenty years

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10 As well known, Japan and the NICs share the common characteristic of having a poor resource endowment, depending on imported oil and other raw materials. In order to pay for this net import they must obtain a surplus in their trade in manufacturers with other countries. The Asean economies viceversa have a rich resource base and have traditionally maintained a trade deficit on their manufactured trade with Japan and the other NICs (see Table 6).
reveals not only that Asian trade has been heavily dependent upon western industrial countries in the past, but also that this extra-regional trade dependency, particularly on the U.S. and Europe, remains critical to Japanese and Asian trade. The data suggest that trade relationships within Asia and between Asia and the rest of the world are organized in unique ways, but certainly not along the lines of a self-contained bloc. Our analysis reveals that Asian integration remains firmly situated within a powerful triangle of trade, and that this integration in fact grows out of that pattern of trade (Riedel, 1991). Japan was the dominant force of this trade network. On the other hand, the bilateral trade relationships between the NICs and Asean increased significantly in the second phase, signaling the emergence of a new potential intra-regional economic pole.

4. Asian Trade Integration: a review of the determinants

The data presented here offer a very different view of Asian trade patterns, including rapidly growing intra-regional trade, from those of the two most prominent explanations in the literature. The data do not show the formation of an exclusive bloc, not even an emerging one. They do also show that rapid economic growth and geographic proximity cannot by themselves explain the growth or distinct patterns of Asia’s intra-regional trade. And the data delineate a unique trade and production arrangement with far reaching strategic consequences for the world economy.

Certainly, there are various political and economic forces responsible for the gradual increase in the regionalization of Asian trade. First, one should notice that Asian trade integration has not been propelled by any formal political or trade agreements, in contrast with European and American integration. The main players in the process of Asian integration have been firms and their private agreements, which have led to what has been called a 'de facto' trade integration.

This feature of the regionalization trade pattern in Asia led many authors to interpret it along the “product cycle” model, in which Japan plays the role of the leading innovative country, and the NICs and other Asian countries follow as second- and third-tier countries on the ladder of comparative advantage. Among the more recent studies which propose the ‘product cycle model’ are Okita (1986), Park (1989), Yamazawa (1990).

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11 In fact the Asean Preferential Trading Agreement, although set up in 1977, is only a limited trade agreement (Yam et al., 1992) and it is not comparable to the trading arrangements in Europe or even in North America.
12 Among the more recent studies which proposes the ‘product cycle model’ are Okita (1986), Park (1989), Yamazawa (1990)
manufactured products, it moves production capabilities in simpler technology, labor-intensive goods to Asian NICs. And as the NICs increase their competitiveness in these products and upgrade their production capabilities into more capital- and technology-intensive lines, more of their labor-intensive production will move to Asean and Chinese producers, which in turn will increase their domestic market shares and, eventually, export to Japan and the NICs. This model has been frequently summed up by the well-known image of wild geese flying in their V-formation13.

Foreign direct investment (FDI) has played a major, if not dominant, role in this shift of production from Northeast Asia to Southeast Asia, which attracted a disproportionately large share of FDI to developing area in the 1980s. In particular, there was a new upsurge of investment from Japan, first into NICs, and in the second half of the 1980s into Asean countries, when the substantial rise of the yen made Japanese firms more interested in investing in the region to cut production costs (Urata, 1993). This rapid expansion of Japanese investment in the Asian Pacific region reinforced the trend toward greater trade integration14.

Though it is a plausible construct, there is still too little evidence to support the product cycle hypothesis. To interpret the changing patterns of trade and industrialisation in Asia according to the product cycle theory, the key hypothesis is that Japan must be the lead economy both in terms of demand and supply in the region. Yet, as shown above, Japan has been, and still is, a weak absorber of other Asian exports. In fact, even the recent increase in imported manufactured products from other Asian countries has been very slight (Tables 3 - 4). Asia’s dependency on markets outside the region for its exports, as previously noted, has then continued to be very high at the beginning of the 1990s. That could change; but it has not happened yet. The demand side is still a very different structure from the one called for by a regional product cycle model. So although the “flying geese” hypothesis might be useful for interpreting a few sectoral trade patterns in Asia, it cannot be used as a general explanation for the increase in the regionalisation of Asian trade15. Some explanation other than product cycle hypothesis or trade on the basis of revealed comparative advantage must be ventured. And this explanation could be related to FDI patterns in the region.

13See Yamazawa (1990) and the classical Akamatsu (1961)
14It is true, as sceptics of the integration trend in Asia observe, that the the share of Japanese direct investment to Asia has been much lower than that to the US. However nearly 40 per cent of Japan's investment in Asia is in manufacturing compared with a quarter in the world as a whole (Bollard and Mayes, 1992).
Japanese FDI has no doubt contributed significantly to shaping the new regional trade pattern, since a large proportion of trade integration derived from intra-company transactions (Park and Park, 1991; Urata, 1993). Part of this investment, in line with product cycle theory, aimed at taking advantage of local natural resources, skills, and relatively low wage costs (Bollard and Mayes, 1992). But the same Japanese multinational companies that set up as “footloose” industries are now pursuing a more lasting involvement in the region\(^{16}\). In other words, interest in the region is no longer motivated only by the search for new low-wage locations. The expansion of Japanese FDI, subcontracting, and outsourcing has in fact created new regional production networks\(^{17}\), often embodying global production strategies (Lim and Siddall, 1993). The growing importance of intra-industry trade within the region also seems attributable largely to an increasing division of labor within multinational companies (Park and Park, 1991), and Japan has developed a large network within the region (Borrus, 1993).

Some authors have optimistically predicted that Japanese FDI and outsourcing would increase the share of East Asian exports to Japan enough to reduce East Asian dependence on North American and European markets (Urata, 1993). This has not yet happened to any significant extent. Clearly Japanese multinationals have assumed a greater role in Japan’s trade in recent years. There is also evidence that part of the exports by Japanese multinational parent companies have been replaced by the production of their overseas affiliates and subsidiaries.

On the other hand, Japan has been active in recycling its trade surplus in the form of FDI to Asia\(^{18}\). Since the mid-1980s Japan's FDI has been allocated mainly to Asian export-oriented industries, primarily to create production and export bases aiming at expanding sales in third country\(^{19}\). In other words, Japanese overseas affiliates in Asia are concentrated in export-oriented industries and are more likely to ship their products to third countries than to Japan, linking up

\(^{15}\)Criticism of the flying geese model as an explanation of East Asian regional growth is also in Park and Park (1991), and Hobday (1993)

\(^{16}\)One should also add that this increase in direct investment has been supported by large amounts of Japan’s foreign aid, also with the aim at contributing to create the necessary infrastructure for the investment of Japanese multinationals (Orr, 1990).

\(^{17}\)Conditions for network strategies are particularly favourable, for example, in the car industry and in the electronics (computer) industry (see Ernst and O’Connor, 1992; Ernst, 1993), given the high degree of international standardisation and the possibilities for splitting up production processes.

\(^{18}\)See, for example, Petri (1992a), whose results show, among other things, that in the case of Japanese direct investment in Thailand, Japanese affiliated firms tend to contribute to Asian ‘triangular trade’, in other words Thai trade deficits with Japan, and surpluses with other countries. 

\(^{19}\)As well known, in the 1970s Japan's investment in Asia were in raw materials extraction and processing, and a minor part in manufacturing substitute for trade, producing there for the local markets.
components and final production for export outside the region toward U.S. and Europe\textsuperscript{20}. This means that Japanese multinationals are likely to move their production bases to other Asian countries without changing the destination of their exports. If this trend continues it is possible that Japan's FDI may indeed exacerbate trade imbalances between U.S. and Europe, on the one hand, and Asia, on the other\textsuperscript{21}.

Even more so, since the Asian NICs more recently have been following the example of Japanese multinational enterprises in developing production systems based on the division of labour in the Asian Pacific region. FDI from the NICS in the Asean countries has grown markedly in the second half of the 1980s and actually surpassed the flow of Japanese FDI to Asean in the 1990 (Jetro, 1992)\textsuperscript{22}.

In this regard, the rapid growth of Japanese and other Asian FDI in the region, by contributing to the growth in the regional production system seems, so far, to have reinforced rather than attenuated the peculiar Asia-U.S.-Europe triangular trade configuration.

5. Concluding remarks

This paper has argued that while intra-regional trade has significantly increased in Asia, this increase has not led to a self-contained bloc nor even to an emergent one. But it has also shown that rapid economic growth of the countries within the region and their relative geographic propinquity cannot by themselves explain the growth or the distinctive patterns of Asia’s intraregional trade. Instead, increased intra-regional trade has, up to now, reinforced a production and trade arrangement that presumes asymmetrical trade between Asia and the rest of the world.

Asian trade has been integrating, not through political pacts as in Europe and North America, but according to corporate strategies of industrial restructuring and production re-organisation. This development of regional production networks in Asia extended integration to both factor and product markets, with strong interactions between the two. The rapid growth of Asian trade and the

\textsuperscript{20}Not only finished products, but also cheap components to Japanese subsidiaries in Europe and America

\textsuperscript{21}See Petri (1992b), who confirm this relationship between FDI in East Asia and growing large trade imbalances.

\textsuperscript{22}One of the main factor determining this sharp increase in FDI towards other Asian countries in the second half of the 1980s was the sharp appreciation of Asian NICs currencies. This together with sharply rising labor costs and growing domestic labor shortages determined a substantial relocation especially of labor intensive production, to lower-cost neighbouring countries whose currencies has depreciated with the dollar. Much of the new investment has been in manufacturing for exports to world markets rather than in raw material extraction and processing or import substituting imports (Lim and Siddall, 1993).
intensification of intra-Asian trade in the second half of the 1980s, however, did not substantially modify the basic feature of the triangular trade pattern that has characterised Asian trade flows in the past. At the beginning of the 1990s, Asian countries still depended heavily on exports to the U.S. and Europe, and their imports were heavily dependent on Japanese technology, tools and components with most Asian countries running large trade deficits with Japan and compensating trade surpluses with the United States and Europe. This unique trade configuration still persists and has continued to enlarge the trade imbalance within Asia, and worsen trade conflicts between Asia and the rest of the world on the other.

Regionalism is usually an issue of great debate because it is interpreted as an obstacle in the path toward the goal of multilateral free trade. In the case of East Asia, the real problem is strong extra-regional export linkages—not intra-regional linkages. A move toward stronger regionalism by developing a dynamic regional domestic market more able to absorb Asian production and exports could make multilateral agreement easier rather than more difficult to achieve. In this case regionalism would then be "desirable".
Appendix

Data on trade flows of Asian countries selected above was aggregated by using an original trade database (SIE World Trade Data Base) derived from the OECD as well as UNITED NATIONS trade statistics (see Guerrieri 1992; 1993). The SIE World Trade data base provides detailed informations on export and import of 83 countries with respect to 400 product groups. The data base includes trade statistics with respect to the 24 OECD countries, the newly industrializing countries (NICs), the other developing countries and the former CMEA countries, and makes it possible to examine and analyze the entire world trade matrix. The source for the basic trade statistics of the SIE-World Trade is the official publications of the OECD and the United Nations provided on magnetic tapes. The SIE data base is organized in different product group classifications at various levels of disaggregation (400 product groups, 98 sectors, 25 categories, 5 branches) according to the three Standard International Trade Classifications (SITC), Revised, Revision 2, Revision 3, defined by the Statistical Office of the UN as to the periods 1961-75, 1978-87, 1988 on. Thus, the main advantage of the SIE World Trade data base lies in the fact that it allows us to use extremely disaggregated time series for products groups, given its system of correspondence between the SITC Revised, the SITC Revision 2 and the SITC Revision 3.

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